

THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County

Volume 6 • Number 5 June 2006

National HIV Testing Week: June 27-July 1 Get Tested and Know Your HIV Status

Introduction

In the U.S., it is estimated that more than 1,000,000 persons are infected with HIV [1]. The largest proportion of HIV/AIDS diagnoses in 2004 was among the men who have sex with men (MSM) behavioral risk group, while African Americans were the racial/ethnic group that was most disproportionately affected by the HIV epidemic. African Americans made up 12% of the population in 2004 but comprised 50% of the estimated 40,000 HIV/AIDS cases diagnosed [2].

CDC estimates that approximately 25% of persons infected with HIV do no know that they are infected. In Los Angeles County, it is calculated that 13,000-15,000 of the nearly 60,000 persons living with HIV are unaware they are HIV infected. Persons unaware of their HIV status may unknowingly infect their sexual and needlesharing partners and infants [3].

To reduce transmission of HIV infection, physicians and healthcare providers are encouraged to counsel patients to know their HIV status and the HIV status of their patient's sex and needle sharing partners.

National HIV Testing Day

In 1995, to increase use of HIV counseling, testing, and referral services, the National Association of People with AIDS designated June 27 as National HIV Testing Day. As has been the practice over the last several years,

DHS has expanded the observation of National HIV Testing day from one day to one week. This year, Los Angeles County's HIV Counseling and Testing (HCT) Week Initiative will take place June 27 through July 1, 2006. Consistent with the county's goal to promote access to HIV counseling and testing services among the most at-risk for HIV residents, OAPP will work with community partners to create new opportunities for HCT services and launch a media campaign to publicize HIV testing the county.

While most HIV testing in the U.S. is conducted in private clinics, public HIV testing services provides the opportunity for needed counseling in addition to testing. Testing in non-traditional settings such as community based organizations, mobile testing units, outreach programs includes comprehensive risk assessments, client-centered counseling, referrals, and disclosure counseling as well as opportunities for partner counseling and referrals services (PCRS) for those who test HIV positive. Such prevention counseling has been found to be effective with behavior change (e.g., increased condom use) [4].

Consent for HIV Testing in a Healthcare Setting

In contrast with HCT facilities, counseling is not a required component of HIV testing in healthcare settings. Health and Safety Code 120990 requires that physicians at a minimum obtain informed consent when testing for HIV. Although written consent is obtained by most

Continued on page 3

Mumps Update

The State of Iowa is experiencing a mumps outbreak that began in December of 2005 with more than 1,889 cases having been reported as of June 1, 2006. An increased number of cases are also occurring in neighboring Midwestern states. Although the source of the outbreak is unknown, the strain of mumps that has been cultured from outbreak cases is the G strain, a common genotype circulating in the United Kingdom as well as other parts of the world.

THE PUBLIC'S HEALTH



313 North Figueroa Street, Room 212 Los Angeles, California 90012

The Public's Health can be automatically e-mailed to you (as a PDF document) each month. To subscribe, please visit http://www.ladhs.org/listserv and enter your e-mail address. Select "Department Newsletters" and then "**The Public's Health**." You are welcome to make copies of this newsletter. To view this publication online – and obtain a variety of public health information and data – visit our website: www.lapublichealth.org



Gloria Molina, First District

Yvonne Brathwaite Burke, Second District

Zev Yaroslavsky, Third District

Don Knabe, Fourth District

Michael D. Antonovich, Fifth District

DEPARTMENT OF HEALTH SERVICES:

Bruce A. Chernof, MD Director and Chief Medical Officer

John Cochran III Chief Deputy Director

Jonathan E. Fielding, MD, MPH Director of Public Health and County Health Officer

A. Belinda Towns, MD, MPH Medical Director, Community Health Services

Robert Kim-Farley, MD, MPH
Director, Communicable Disease Control and Prevention

EDITORIAL BOARD:

James DeCarli, MPH, MPA, CHES Kevin Donovan, MPH Anna Invencion, MPH Denise F. Johnson, MPH, Psy.D Katheleen Lang, MPH

David Meyer, MPH

Sadina Reynaldo, PhD

A. Belinda Towns, MD, MPH, Editor Sheree Poitier, MD, Managing Editor Maria Iacobo, MS, Consultant Alan Albert, Design & Production

Mary Louise Garcia, Administration

Mumps Update...from page 1

There is no evidence that a resurgence of mumps is occurring in Los Angeles at this time and none of the suspect mumps cases that have been reported in Los Angeles County to-date have been linked to the Midwest outbreak. However, health care providers should consider mumps in all patients who present with two or more days of swelling of the parotid or other salivary glands.

Previous vaccination does not guarantee that a patient with the above clinical signs does not have mumps; 20% of persons receiving one life-time dose of mumps vaccine and 10% of persons receiving two doses of vaccine can still develop the disease if exposed.

Health care providers should obtain confirmation on all suspect mumps cases by obtaining serum specimens for mumps IgM and acute mumps IgG tests. A convalescent serum specimen for a follow-up mumps IgG should be obtained two weeks after the first specimen. These tests are necessary because the mumps IgM test can be negative in some persons who were previously vaccinated against mumps but who developed mumps as a result of an insufficient immunologic response. In instances where one or more mumps cases are linked to each other, a mumps viral culture should be obtained on at least one of the linked cases.

Public Health can assist, if needed, in obtaining the viral culture once the case has been reported.

Remember that all suspect mumps cases are required to be reported to the local health department where the suspect mumps case resides, within seven days of identification. However, as a result of the outbreak in the Midwest, the DHS encourages the reporting of suspect mumps cases on the day they are identified. Suspect cases can be reported to the DHS Morbidity Central Reporting Unit by phone at 888-397-3993 or fax to 888-397-3778. (For Long Beach residents, call 562-570-4301/4302 or fax to 562-570-4374. For Pasadena residents, call 626-744-6128 or fax to 626-744-6115.)

The State of California Department of Health Services Immunization Branch recommends that persons entering college and health care workers (especially those who provide primary and acute care) have documentation of receipt of two mumps-containing vaccine doses given after the first birthday. An exception can be made if the person has documentation of having had mumps, or unless they were born before 1957 (persons born before 1957 who have no documentation of immunity should be considered for vaccination with 1 dose). The measles, mumps, rubella (MMR) vaccine is the only mumps-containing vaccine widely available in the U.S. and it should be used to start or complete the mumps vaccination series.

More information about mumps is available on the Los Angeles County Immunization Program web site http://www.lapublichealth.org/ip.

Alvin Nelson El-Amin, MD, MPH Medical Director, Immunization Program

National HIV Testing Week...from page 1

physicians, written consent is not mandatory for physicians ordering a routine HIV test.

Mandatory HIV Testing in Pregnant Women

HIV infections attributed to perinatal HIV transmission have dropped 95% since 1992 due to both enhanced HIV screening and treatment of HIV infected pregnant women with antiretroviral medications [5]. In 1995, the U.S. Public Health Service issued guidelines recommending universal counseling and voluntary HIV testing of all pregnant women and treatment for those infected [6]. Despite efforts nationwide to screen women for HIV during pregnancy, there are indications that all women are not offered HIV screening and infants may be at risk for perinatal HIV transmission [7].

California has enacted multiple prenatal testing laws (California Health and Safety Code Sections 125085, 125090, 125105, and 125107) which require that all prenatal care providers offer HIV information, education and testing as a routine part of prenatal care. Under the Health and Safety Code 125090, a woman must sign a consent form prior to HIV testing and has a right to refuse HIV testing. If an HIV test result is not documented in a woman's chart at the time of delivery, HIV testing is recommended so that antiretroviral treatment (ARVs) can be started during labor in order to reduce the risk of HIV transmission associated with labor and delivery. CDC recommends rapid testing in this setting [8].

Rapid HIV Testing

The FDA approved the first rapid HIV test for use on whole blood samples in 2002 and subsequently approved the first oral based rapid test in 2004. Rapid testing is used frequently in labor and delivery rooms, emergency rooms and at HIV testing and counseling facilities. As test results are available between 20 to 40 minutes, results can be delivered during an initial encounter with a client or while a woman is still in labor. Prior to rapid testing, 25-33% of persons tested for HIV did not receive results [9]. Rapid testing has increased the percentage of persons who receive their HIV test results [10].

As is the case with the conventional HIV enzyme immunoassay (EIA), rapid HIV testing is a screening diagnostic procedure. A reactive rapid test must be confirmed by Western Blot (WB) or Immunofluorescent Assay (IFA) before a HIV infection can be diagnosed. Moreover, despite having high specificity, false positives can occur, especially in populations with low HIV prevalence. If a rapid test is non-reactive, an HIV negative result is

provided to the client and no other testing is required. If the rapid test is reactive, the client receives a preliminary positive result and a confirmatory specimen must be collected from the client to perform a confirmatory test at a laboratory. The client is counseled and usually returns for the confirmatory test within one week.

Since late 2003, Los Angeles County providers began providing HIV testing using OraQuick Rapid HIV tests. Broad-scale implementation of rapid HIV testing at OAPP-supported agencies began in June 2004. OAPP supports over 10,000 rapid HIV tests annually at 12 community-based organizations, 13 drug treatment centers and 2 court testing sites.

Community-based agencies have reported overwhelming community acceptance of rapid testing, and OAPP anticipates that the majority of HIV testing in 2007 will be rapid HIV testing. It is anticipated that along with rapid testing, expanded HIV testing will increase access to testing so that persons at risk for HIV know their HIV status permitting them to take steps to protect their health, access care, and inform and protect their sex and needle-sharing partners.

Jan B. King, MD, MPH Medical Director, Office of AIDS Programs and Policy

Sophia Rumanes, MPH
Acting Director, Prevention Services Division
Office of AIDS Programs and Policy

Resources

California AIDS Hotline: 1-800-367-AIDS Client Advocacy Services Hotline: 1-866-772-2365 Los Angeles Resource Directory: http://www.hivla.org

References

- 1. Glynn M, Rhodes P. Estimated HIV prevalence in the United States at the end of 2003.
- National HIV Prevention Conference; June 2005; Atlanta. Abstract 595.)

 2. CDC. A Glance at the HIV/AIDS Epidemic. Centers for Disease Control and Prevention. April 2006, http://www.cdc.gov/hiv/resources/factsheets/At-A-Glance.htm.
- Marks G, Crepaz N, Senterfitt JW Janssen RS. Meta-analysis of high-risk sexual behavior in persons aware and unaware they are infected with HIV in the United States: Implications for HIV prevention programs. JAIDS 2005;39:446-52.
- Kamb ML, Fishbein M, Douglas JM Jr, et al. Efficacy of risk-reduction counseling to prevent human immunodeficiency virus and sexually transmitted disease: A randomized control trial. JAMA 1998;280:1161-7.
- CDC. HIV/AIDS Surveillance Report, 2004 (Vol. 16). Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention; 2005:5-45.
- CDC. US Public Health Service recommendations for human immunodeficiency virus counseling and voluntary testing for pregnant women. MMWR 1995;44 (No. RR-7):1—14.
- Anderson JE, Chanddra A, Mosher WD. HIV testing in the United States, 2002. Adv Data. 2005 Nov 8;(363):1-32.
- CDC. Revisesd Recommendations for HIV Screening of Pregnant Women. MMWR. 2001;50:RR19):59-86.
- CDC. HIV counseling and testing in public funded sites: 1995 summary report. Atlanta: US Department of Health and Human Services, CDC, September 1997.
- Greenwald JL, Burstein GR, Pincus J, Branson B. A Rapid Review of Rapid HIV Antibody Tests. Curr Infect Dis Rep 2006;8:125-131.

Trauma, Biochemical Effects, and Consequences of Anxiety Disorders

Anxiety disorders (AD) are among the most common psychiatric disorders in the U.S. and one of the most commonly encountered medical conditions observed in primary care (Rakel, 2003). AD's are illnesses that monopolize people's lives with overwhelming fear and anxiety that become chronic and progressively worse over time. AD's include:

- panic disorder (PD)
- generalized anxiety disorder (GAS)
- specific phobia (SP)
- social phobia (also known as social anxiety disorder-SP)
- obsessive-compulsive disorder (OCD)
- acute stress disorder (ASD) and,
- post-traumatic stress disorder (PTSD).

The average patient with an AD consults approximately ten healthcare professionals before a diagnosis is made (Pozucho, et al., 1999). In 1999, a Report of the Surgeon General found that mental disorders in the U.S. account for 15% of the overall burden of disease from all causes, and more than the burden associated with all forms of cancer. In addition, AD are among the most common of all mental disorders (Kessler et al., 2005; Regier, et al., 1990). In the U.S., the one year prevalence rate for mental disorders is 20% of the population (based upon surveys from the Epidemiologic Catchment Area, 1980 and the National Comorbidity Survey, 1990) 13.3% of whom have AD or 19.1 million people between the ages of 18-54 (Kessler et al., 2005; Pozucho, et al., 1999). In addition, approximately 13% of children between the ages of 9 and 17 years have an AD (USSG, 1999). The annual cost of AD in the U.S. is \$46.6 billion in direct and indirect costs, approximately onethird of the nation's total mental health bill of \$148 billion (NMHA, 1990).

The manifestations of AD are classified into general, neurological, cardiovascular, respiratory, gastrointestinal, and urinary categories (Figure 1). The symptoms within these categories include fatigue, weakness, diaphoresis, insomnia, flushing, chills, dizziness, paresthesias, derealization, near syncope, tremulousness, restlessness, palpitations, chest pain, tachycardia, dyspnea, hyperventilation, chocking, dry mouth, vomiting, diarrhea, nausea and urinary frequency.

The signs and symptoms among each clinical subtype of AD are varied (a description on the types, symptoms, and risks/occurrence of each specific AD are described in Figure 2). Among AD's, under diagnosis and misdiagnosis are common due to patients normalizing their symptoms and the disorder being missed by providers. Co-morbidity and poor coping mechanisms such as alcohol and substance abuse among those with AD are common, making differential diagnosis even more difficult. Anxiety disorders also occur with other mental disorders, such as depression (Maser and Cloninger, 1990; Regier, et al., 1990).

For example, nearly 60% of patients who are diagnosed with Obsessive-Compulsive Disorder (OCD) are later diagnosed with depression (Robins and Regier, 1991). Panic attacks often co-occur frequently in schizophrenic patients (Boyd, et al., 1984), although they are easily overlooked. Once anxiety disorders are identified however, physicians can help make their patients aware that effective treatments are available. When effectively treated, associated poor coping behaviors such as drug and alcohol abuse and depression will also decline and the afflicted individual can return to a relatively normal, productive life. The Surgeon General emphasizes the importance of public health practices that identify risk factors for mental health problems and identifies the importance of physicians maintaining awareness and screening patients for anxiety disorders (USDHS, 1999).

Risk Factors

While Panic Disorder (PD) appears to have a strong genetic component (NIMH, 1998), other AD seem to be associated with traumatic life events. Overall, females are more susceptible to AD when compared to males. Age (childhood and adolescence) and family history such as genetics, personality, family dynamics, and psychological influences, have also been shown to be potential risk factors for developing anxiety disorders. Neuroimaging studies suggest traumatic life experiences are associated with anxiety disorders (Figure 3). These traumatic life experiences include intimate partner violence (IOM, 1988; Eisenstat & Bancroft, 1999), trauma such as sexual assault (Kulka, et al., 1990), and child abuse, either physical, sexual, or neglect (Polusny & Follette, 1995).

Figure 1: Symptoms of anxiety (DSM-IV-TR. Washington DC: American Psychiatric Association; 2000)

Category	Symptom
General	Fatigue, weakness, diaphoresis, insomnia, flushing, chills
Neurological	Dizziness, paresthesias, derealization, near syncope, tremulousness, restlessness
Cardiovascular	Palpitations, chest pain, tachycardia
Respiratory	Dyspnea, hyperventilation, chocking
Gastrointestinal	Dry mouth, vomiting, diarrhea, nausea
Urinary	Frequency

These traumatic events can result in conditioned fear responses. For example, being assaulted in a room can result in a conditioned fear response from the traumatic event and lead to phobias of confined spaces. Long term exposure to family violence either as a child or intimate partner victim is also a known risk factors and has been shown to lead to the biochemical and physiological states that predispose to AD (Figure 4a). Each phase produces physiological responses of fear, anxiety, and habituation. Overtime, as each cycle is repeated (Figure 4b), chronic stress results in hyperglucocorticoids, which have been shown to atrophy the hippocampus and amygdala.

Biochemical Effects

The hippocampus and amygdala are important neural structures that regulate emotions and emotional processing such as fear responses. These structures play an important role in decoding emotional learning and memory. The amygdala receives visual and auditory perceptual information and helps to process one's perception. It is however very sensitive to manipulative stimulation.

Elevated glucocorticoids lead to atrophy and alter neurotransmitters to these structures. Neuroimaging studies have demonstrated an association between stress and hippocampus atrophy and neuroplasticity (Sapolsky, 1996) due to hypoglucocorticoids. Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET) studies as well as non imaging studies have associated reduced hippocampus and amygdala volumes with both sexual abuse and PTSD (Driessen, et al., 2000; DeBellis, et al., 2000; Bremner, 1999). Studies of children with anxiety disorders showed exaggerated amygdala response to fearful faces compared to healthy children (Thomas, et al., 2001). Finally, studies have also associated repeat stress found among victims of intimate partner violence with structural plasticity of the hippocampus leading to neurogenesis of the dentate gyrus and dendritic remodeling (resulting from hypoglucocorticoids in CA3

region (Margarinos, 1997; McEwen, 2001). Amygdala lesions can result in a person misperceiving an emotionally driven experience (Best, 2002). This can often lead to unnecessary aggressive behavioral responses as observed in many anxiety disorders. Damage to these structures increases the risk of developing anxiety disorders (Figure 3).

Consequences of Anxiety Disorders

Studies consistently suggest that anxiety disorders have detrimental chronic effects to a person's quality of life. Suicide: Studies have shown that among those with panic disorder, 18% attempt suicide and 12% of those with social phobias and OCD attempt suicide. **Depression:** Among those with anxiety disorders 70% have a lifetime risk for depression. Between 50-65% of those with PD and 66% of those with OCD suffer from depression. Depression is more prevalent among those with GAD, social phobia, and social anxiety. And finally, those with PTSD are between four and seven times as likely to be depressed compared to those without PTSD. Alcohol and substance abuse: Those with GAD, panic disorders and social phobia often use alcohol or drugs as coping mechanisms and appear to be at a higher risk for alcohol use. Substance abuse is even more common in those with PTSD. Among adolescents, anxiety disorders not only increase risk for drug and alcohol use, but also eating disorders. Relationship problems (interpersonal, work, school): Multiple studies suggest that anxiety disorder significantly affects work and intimate relationships. **Physical Health:** While causal connections between anxiety and medical disorders are unclear, studies have shown an association between anxiety disorders and cardiovascular and gastrointestinal disease. For example, anxiety can trigger abnormal cardiac rhythms among those with or without heart conditions and a higher rate of sudden death from cardiac events has been observed among those with panic disorders, PTSD, and phobias. Anxiety has also been associated with effects on the gastrointestinal tract, where roughly 50% of cases of

Figure 2: Description on the types, symptoms, and risks/occurrence of anxiety disorders.

Type of Anxiety	Symptoms	Risks/Occurrence
Panic Disorder (PD): a discrete period of intense fear or discomfort that is associated with numerous somatic and cognitive symptoms (MSD-IV).	sweating, palpitations, trembling, shortness of breath, sensations of choking or smothering, chest pain, nausea or gastrointestinal distress, tingling sensation, dizziness or lightheadedness, and chills or hot flashes.	One-year rates are 2% of the U.S. population (Kessler, et al, 1994). It is twice as common among women as men (APA, 1998) and the age of onset is between late adolescence and mid adult life.
Agoraphobia: a severe and pervasive anxiety about being in situations from which escape might be difficult or avoidance of situations such as being alone outside of the home, traveling in a car, bus or airplane, or being in a crowded area (DSM-IV).	Symptoms include behavioral outcomes of repeated panic attacks with worry, preoccupation, and avoidance (Barlow, 1988). A formal diagnosis is agoraphobia without a history of PD (DSM-IV).	One-year rates are 5% of the U.S. population. It is two times as common among women (Magee, et al, 1996) and generally develops after the onset of PD.
Generalized Anxiety Disorder (GAD): a protracted period of anxiety and worry for > 6-months.	Multiple associated symptoms such as muscles tension, easily fatigued, poor concentration, insomnia and irritability (DSM-IV).	The 1-year prevalence is 3% of the U.S. population. It is equally as common among men and women and 50% of onset begins in childhood or adolescence (Brawman-Mintzer & Lydiard, 1996).
Specific phobia: a marked fear of specific objects or situations such as animals, insects, heights, elevators, automobile driving, water, storms, blood or injections (DSM-IV)	Avoidance from stimuli	Occurs in 8% of the U.S. adult population. Generally onset begins in childhood; however a second peak can occur in the middle 20's (DSM-IV).
Social phobia: a persistent anxiety in social situations, such as performances, public speaking (Ballenger et al., 1998).	Symptoms include sweating, trembling, blushing, or haphazard speaking. The 1-year prevalence is between 2-7% of the U.S. population.	It is more common among women (Wells et al, 1994) and onset begins in childhood or adolescence (Kagan et al, 1988).
Obsessive-Compulsive Disorder (OCD): recurrent, intrusive thoughts, impulses, or images that are perceived as inappropriate, grotesque, or forbidden (DSM-IV).	Common signs of OCD include repeated hand washing, checking and mental acts such as counting or praying over and over.	The 1-year prevalence for OCD is 2.4%. It is equally as common among men and women. Onset for males begins in adolescence to adult and among females during young adulthood (Burke, et al, 1990; DSM-IV).
Acute Stress Disorder (ASD): anxiety and behavioral disturbances that develop within the first month after exposure to extreme trauma, such as dissociation (reflection of a perceived detachment of the mind form the emotional state).		
Post-Traumatic Stress Disorder (PTSD): if symptoms of ASD persist for more than 1-month diagnosis is changed to PTSD. PTSP includes three subcategories including 1) acute: <3 months; 2) chronic: >3 months; and 3) delayed onset: 6 months after traumatic event.	Decreased self-esteem, loss of sustained beliefs about people or society, hopelessness, a sense of being permanently damaged, and difficulties in previously established relationships.	The 1-year prevalence is 3.6% of the U.S. population and twice as common among women (Kessler, et al, 1995).

irritable bowel syndrome and peptic ulcer have been found to be related to anxiety (Goodwin, 2002). Further studies have associated anxiety with tension headaches, sleep disorders, and overall poor physical health. Injuries from excessive washing, physical acts and hair loss from repeated hair pulling have been described among those with OCD.

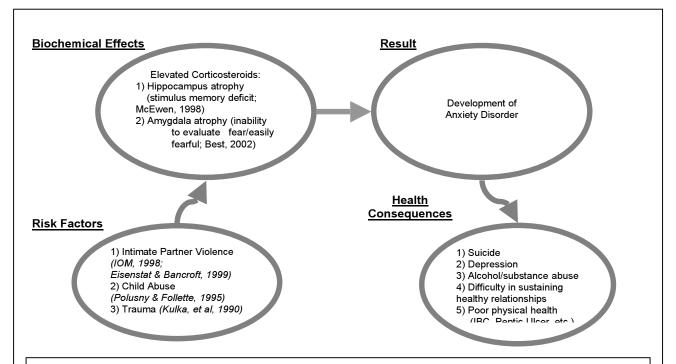


Figure 3: Etiology of Anxiety. While the pathophysiology of anxiety is multi-factorial and remains unclear, research suggests in addition to gender (females generally twice as likely as males), age (child & adolescence) and genetics/family dynamics & psychological influences, that early life experiences (intimate partner violence, child abuse, trauma) can also play a vital role in the development of anxiety disorders. This diagram illustrates the etiology of anxiety based upon potential life experience risk factors.

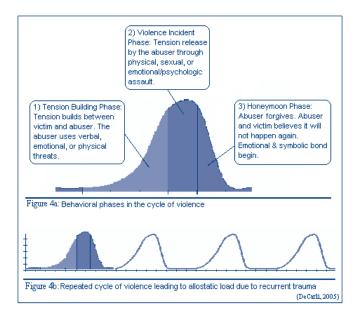


Figure 5: Common anxiety disorders among children

Common Childhood Anxiety Disorders Separation anxiety disorder Generalized anxiety disorder (or Overanxious disorder of childhood) Social phobia (or Social anxiety disorder) Obsessive-Compulsive Disorder

Figure 6a: Questionnaires to assess childhood anxiety disorders

Screening Instrument	Source
Child Behavior Checklist (CBCL)	Achenbach & Edelbrock (1991)
Leyton Obsessional Inventory-Child Version (LOI-CV)	Swedo (1989)
Diagnostic Interview Schedule for Children	Shaffer & Fisher (1997)
Revised Children's Manifest Anxiety Scale (RCMAS)	Reynold & Richmond (1985)
Multideimensional Anxiety Scale for Children	March (1997)
State-Trait Anxiety Inventory for Children (STAIC)	Spielberger (1973)
Diagnostic Interview Schedule for Children (DISC)	Shaffer & Fisher (1998)

Figure 6b: Questionnaires to assess adult anxiety disorders

Screening Instrument	Source		
Beck Anxiety Inventory	Beck, 1990		
Duke Anxiety-Depression Scale	Parkerson (1997)		
Anxiety Disorders Interview Schedule	Brown (1994)		
Hamilton Anxiety Rating Scale	Hamilton (1959)		
PRIME-MD	Spitzer (1994)		
SDDS-PC	Broadhead (1995)		

What Can Physicians Do?

Physicians are likely to encounter signs and symptoms from the consequences of anxiety. For example, findings from prospective studies of one-year prevalence rates of mental and addictive disorders found that patients with anxiety disorders receive treatment in primary care and other medical facilities as often as mental health providers (Regier, 1993). In addition to screening adults and adolescents for suicide, intimate partner violence, depression, and alcohol & substance abuse, it is recommended that physicians be alert to personal health problems that accompany or resemble anxiety disorders. While anxiety disorders have been observed among children, GAD, SP, and OCD are most common among children. Separation anxiety disorder is an additional diagnosis that must be considered as well (Figure 5). Various anxiety screening tests are available to help determine the causes, type, and frequency of anxiety and physicians are encouraged to become familiar with their use. Physician screening tools for testing for anxiety disorders among adults are described in Figure 6a and for children in Figure 6b.

Physicians can refer patients to the county's Department of Mental Health Service Providers Information Referral 24-hour hotline at 1-800-854-7771 or at http://dmh.lacounty.info/providers/map-sa.html. Physicians can also visit the following resources on anxiety disorders: Anxiety Disorders Association of America www.adaa.org; National Mental Health Association www.nmha.org/infoctr/factsheets/index.cfm; the National Institute of Mental Health's toll-free information line 1-888-ANXIETY www.nimh.nih.gov/anxiety/anxietymenu.cfm.

James M. DeCarli, MPH, MPA, CHES Research Analyst III/Behavioral Sciences Injury & Violence Prevention Program

West Nile Virus 2006:

Now Endemic to California

The most notable infectious disease to emerge in Los Angeles and California during 2004 was West Nile virus (WNV). WNV first appeared in Southern California in 2003 with one confirmed case of West Nile fever in a Los Angeles County resident. During that year, numerous other predictors of WNV-related disease (i.e., WNVinfected dead crows, sentinel chickens, and mosquito pools) indicated that substantial additional human cases would occur in subsequent years. In 2004, Los Angeles County reported 309 WNV infections including 14 deaths—the most of any other jurisdiction in California. The majority of cases occurred among those residing in the suburban valley, areas close to the San Gabriel River and in hillside communities—the coastal communities were spared. However, 2005 presented a markedly different picture—our county reported only 43 infections and no deaths. Despite this dramatic decrease in infections, continuing surveillance efforts have demonstrated that WNV is now endemic to our region.

While it is still too early to predict the pending severity of the upcoming 2006 season, one thing is certain, cases are imminent. Moreover, the heavy rain, which has been followed by our now warm weather, provides the ideal breeding environment for mosquitoes—the key vector in WNV disease transmission. Standard environmental surveillance efforts (e.g., bird and mosquito surveillance) have demonstrated that the virus continues to be prevalent in our area—it is not too early to prepare. It is critical that healthcare providers in our county be aware of proper diagnostic and testing procedures, understand the importance of prompt reporting, and educate their patients to protect themselves against infection—especially those at high risk for complications from illness (e.g., the elderly and the immunocompromised).

Disease reporting: Key to prevention and mandated by state law

In 2006, the Los Angeles County Department of Health Services will continue to conduct surveillance for human WNV infection—tracking both West Nile fever and neuroinvasive disease. Recent studies have indicated West Nile fever is not as mild as first thought and effects of the infection can linger for weeks to months. Enhanced human surveillance will allow for the timely identification of disease transmission and the prevention of subsequent cases through the communication of this



West Nile Virus Prevention: Property, Protection, and Products

Prevention is your best protection against mosquitoes infected with the West Nile virus.

- Eliminate standing water on your property: this is where mosquitoes breed. Drain pots, unclog gutters, and keep swimming pools, wading pools, fountains, etc., clean and chlorinated or drained and covered.
- Make sure that door and window screens are in good condition to keep the mosquitoes out.
- When you are outdoors, use an insect repellent containing DEET or picaridin (both equally effective), or oil of lemon eucalyptus (not as long-lasting). Always follow product directions.

Updated information (from April 18, 2006) on mosquito repellants is available at: www.cdc.gov/ncidod/dvbid/westnile/resources/uprepinf o.pdf

For full West Nile prevention information visit: www.cdc.gov/ncidod/dvbid/westnile/prevention_info.htm

information to local mosquito abatement districts that provide targeted mosquito control and prevention efforts. Case information will guide the public health department in providing targeted health education via the mass media and community organizations to communities at particularly high risk.

Enacted in July 2004, WNV infection was added to the list of reportable diseases by authority of the Health Officer under California Code of Regulations, Title 17, Sections 2503 and 2505. Physicians and laboratories are required to report all positive laboratory findings of WNV to the Department of Health Services within one (1) working day. A standard Confidential Morbidity Report (CMR) can be used; the CMR may be faxed to the Department of Health Services Morbidity Unit at 1-888-397-3778 or called in during normal business hours to 1-888-397-3993.

Continued on page 11

West Nile Virus...from page 10

Los Angeles County Public Health Laboratory

Diagnostic Testing Guidelines for West Nile Virus

WNV testing is recommended and available on individuals with the following:

- a. Encephalitis
- b. Aseptic meningitis (individuals 18 years of age or older)
- c. Acute flaccid paralysis/Atypical Guillain-Barré syndrome
- d. Febrile Illness compatible with West Nile fever syndrome:
 - A healthcare provider must evaluate the case.

Note: Symptoms associated with West Nile fever syndrome can be variable and often include headache, fever (≥38°C), and muscle weakness, rash, swollen lymph nodes, eye pain, nausea or vomiting.

Instructions for Sending Specimens:

REQUIRED

- Acute Serum: 5-10 ml of blood obtained at least 7 days after symptom onset in red top tube, spun, separated, and refrigerated.
- Convalescent Serum: only if West Nile infection is highly suspected and acute serum is negative, ≥5 ml of blood collected 3-5 days after the acute serum
- Cerebral Spinal Fluid: 1-2 cc stored frozen.
- Each specimen should be labeled with date of collection, specimen type, and patient name.
- Specimens should be sent on <u>cold pack</u> using an overnight courier.
- The Los Angeles County Public Health Laboratory requisition form is recommended.

Send specimens and lab slips to:

LA County Public Health Laboratory, Serology Section 313 N. Figueroa Street, Room 1227 Los Angeles, CA 90012

Phone: 213-250-8619 Facsimile: 213-482-3907

We remind clinicians and infection control professionals that all cases of acute encephalitis and meningitis (including those with viral, bacterial, fungal, or parasitic etiologies) are also reportable under the current California Code of Regulations (Section 2500) to the Los Angeles County Department of Health Services within 1 working day by telephone.

Department of Health Services laboratory confirmation discontinued

The Los Angeles County Public Health Laboratory remains available for initial specimen testing and confirmation of ambiguous results (see Diagnostic

Testing Guidelines for West Nile Virus). However, specimens positive for acute WNV infection in commercial labs do not require confirmation by the Public Health Laboratory to meet the WNV case definition since an excellent correlation was found between WNV positive tests in commercial labs and subsequent confirmation in reference Public Health laboratories. It is recommended that patients should not have WNV screening tests performed unless they have signs or symptoms compatible with West Nile fever (i.e., headache, fever, muscle pain rash lasting more than 3 days), aseptic meningitis, encephalitis, or acute flaccid paralysis.

West Nile Virus...from page 11

For questions or complaints about mosquitoes...

The Los Angeles County Department of Health is responsible for monitoring and addressing human health problems in our county, but is not directly involved with mosquito control activities. This important action is under the control of the county's five independent mosquito control (abatement) districts. For questions about West Nile virus and mosquito control in neighboring cities and jurisdictions, contact their respective health departments.

Rachel Civen, MD, MPH
Medical Epidemiologist
Acute Communicable Disease Control

For more information about West Nile virus:

www.lapublichealth.org/acd/VectorWestNile.htm www.cdc.gov/ncidod/dvbid/westnile/index.htm

West Nile virus printed information is available in 9 languages (English, Cambodian, Armenian, Russian, Spanish, Vietnamese, Chinese, Korean, and Farsi) by calling:

Acute Communicable Disease Control
213-240-7941

Reporting Dead Birds Still Needed

Since sick or dead birds are an excellent indicator of the local presence of West Nile virus, reports are needed to guide infection control and surveillance efforts. Although not all birds will be collected, phone reports are important.

Report all dead birds to:

Los Angeles County Veterinary Public Health

1-877-747-2243

or

California Department of Health Services

1-877-WNV-BIRD

NOTE: Routine contact with birds (alive or dead) or other animals cannot transmit West Nile virus to humans. Dead birds can be safely disposed of by using gloves or a plastic bag to place the carcass into the garbage.

Los Angeles County Mosquito Abatement Districts:

- Antelope Valley Mosquito and Vector Control District (661) 942-2917
- Compton Creek Mosquito Abatement District (310) 639-7375
- Greater Los Angeles County Vector Control District (562) 944-9656
- Los Angeles County West Vector Control District (310) 915-7370
- San Gabriel Valley Mosquito and Vector Control District (626) 814-9466

Neighboring Health Departments:

City of Long Beach	(562) 570-4132
City of Pasadena	(626) 744-4000
Orange County	(714) 834-8180
 Ventura County 	(805) 981-5101
Riverside County	(951) 358-5107
• San Bernardino County	(909) 387-6280

Working Together to Improve the Health of Mothers and Children in Los Angeles County: The Perinatal Summit

On October 24-25, 2005, the Los Angeles County Department of Health Services, Los Angeles Best Babies Collaborative Center for Healthy Births, and the March of Dimes, cosponsored the Perinatal Summit "Healthy Births Through Healthy Communities: Connecting Leadership to Achieve a Unified Commitment to Action." The goals of the Perinatal Summit were to "engage communities, connect leadership, build sustainable policies, and achieve a unified commitment to action." The Perinatal Summit brought together health care and public health professionals to develop recommendations for efforts to improve infant health outcomes.

During the second day of the Perinatal Summit, participants agreed to begin implementing the following six recommendations:

- 1. Build upon and strengthen comprehensive perinatal services for all women
- 2. Assure every newborn is enrolled in health insurance before leaving the hospital
- 3. Integrate perinatal resources into an information system
- 4. Promote risk appropriate perinatal care
- 5. Encourage every woman to have a reproductive life plan
- 6. Increase provider and consumer education

The Perinatal Summit...from page 12

More specific action steps to be taken to meet each recommendation are available at the Perinatal Summit website, http://www.labestbabies.org/PerinatalSummit.htm.

Why Have a Perinatal Summit in Los Angeles County

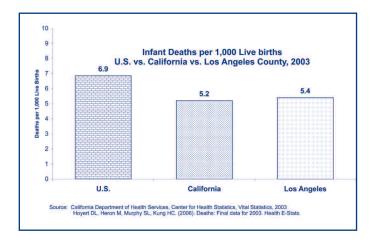
More than one in four children born in California are born in Los Angeles County.¹ While the infant mortality rate in the county (5.4 infant deaths per 1,000 live births) compares favorably with national statistics (6.9 per 1,000 live births), it exceeds that of the rest of California (5.2 per 1,000 live births).¹,² Racial disparities exist such that African American babies have more than twice the risk of dying before their first birthday versus babies of other races.¹

The prevalence of low birthweight (babies born weighing less than 2,500 grams) has increased steadily over the last ten years from 6.4 to 7.1 percent.¹ Low birthweight and preterm birth are not only risk factors for infant mortality, but they also increase the risk of later morbidity and poor school performance.³.⁴ The Perinatal Summit sought to address these issues to improve the health of mothers and babies through short-term efforts that produce sustainable results.

How You Can Become Involved

If you wish to help implement the six Perinatal Summit recommendations, there are a variety of opportunities available.

- Participate in a Healthy Births Learning Collaborative (HBLC) in your Service Planning Area. For more information about the HBLC meetings near you, visit the LABBN website, http://www.labestbabies.org/
- Any pregnant woman can have a preterm birth. Begin
 to advise patients on the signs and symptoms of preterm
 birth at 20 weeks gestation. Make sure your patients
 know what to do if their labor starts early. More
 information is available at the March of Dimes website,
 http://www.marchofdimes.com.
- Encourage all women of reproductive age to understand how their health can affect that of their babies. For example,
 - The American Academy of Pediatrics advises that all women of reproductive age should take a multivitamin with 400 micrograms of folic acid daily to prevent neural tube defects, even if they do not have current plans to become pregnant.⁵
 - The Surgeon General recommends that women not smoke, drink alcohol, or use illegal drugs at any point during their pregnancy.^{6,7}



 Advise women and men of all ages on the importance of establishing a reproductive life plan. Planned pregnancies can help women make healthier choices before and during pregnancy.

To stay informed about the progress of the Perinatal Summit recommendations, The Los Angeles Best Babies Network (LABBN) organizes HBLC meetings that meet regularly in all eight of the service planning areas in the county http://www.labestbabies.org/ or contact Dr. Diana Ramos, MCAH Medical Director dramos@ladhs.org or 213-639-6415.

Diana Ramos, MD, MPHMedical Director
Maternal, Child, and Adolescent Health

References

- Los Angeles County Department of Health Services, Maternal, Child, and Adolescent Health Programs. (2005). California MCAH Family Health Outcomes Project: Title V Perinatal Indicators 2003.
- Hoyert DL, Heron M, Murphy SL, Kung HC. (2006). Deaths: Final data for 2003. Health E-Stats.
- 3. McCormick MC. (1985). The contribution of low birthweight to infant mortality and childhood morbidity. The New England Journal of Medicine. 312: 82-90.
- Petrou S, Sach T, Davidson L. (2001). The long-term costs of preterm birth and low birthweight: Results of a systematic review. Child: Health Care and Development. 27:97-115.
- American Academy of Pediatrics Committee on Genetics. 1999. Folic acid for the prevention of neural tube defects. Pediatrics: 104(2):325-327.
- 6. Alcohol warning for pregnant women. (2005). FDA Consumer, 39(3):4.
- 7. The health consequences of smoking: A report of the Surgeon General. (2004). Available at: http://www.surgeongeneral.gov/library/smokingconsequences/.

CALENDAR

Immunization Coalition of Los Angeles County (ICLAC)

Quarterly forum for immunization stakeholders to learn about the latest immunization updates at the state and local levels, exchange information on best immunization practices, and to collaborate programmatically on immunization projects in an effort to decrease immunization disparities across the lifespan. For more information, contact Wendy Berger at 213-351-7800 or wberger@ladhs.org.

Date: Wednesday, July 19, 2006 Time: 9:30am - 12noon

Location: California Hospital Medical Center

Levy Hall Keck Hall Conference Room

1401 South Grand Avenue Los Angeles, CA 90015

Parking \$6; entrance on 15th St. b/w Venice and Grand

This Issue . . .

National HIV Testing Week
Mumps Update1
Anxiety Disorders4
West Nile Virus 2006
The Perinatal Summit

THE PUBLIC'S HEALTH

COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES
Public Health

313 North Figueroa Street, Room 212 Los Angeles, California 90012

Selected Reportable Diseases (Cases)1 - January 2006							
	THIS PERIOD	SAME PERIOD LAST YEAR	YEAR END TOTALS				
Disease	Jan 2006	Jan 2005	2005	2004	2003	2002	2001
AIDS*	123	111	1,514	2,213	2,433	1,653	1,302
Amebiasis	15	10	120	98	121	102	139
Campylobacteriosis	73	60	725	915	1,100	1,067	1,141
Chlamydial Infections	3,395	3,296	39,981	38,464	36,900	35,688	32,670
Encephalitis	4	4	67	137	38	61	41
Gonorrhea	940	832	10,828	9,696	8,078	7,800	7,743
Hepatitis Type A	82	13	470	319	376	438	542
Hepatitis Type B, Acute	5	6	56	71	56	29	44
Hepatitis Type C, Acute	0	0	3	5	0	3	1
Measles	0	0	0	1	0	0	8
Meningitis, viral/aseptic	37	41	680	790	899	466	530
Meningococcal Infections	9	7	37	28	32	46	58
Mumps	2	0	8	2	10	16	17
Non-gonococcal Urethritis (NGU)	64	101	972	1,470	1,410	1,393	1,429
Pertussis	23	9	433	141	130	170	103
Rubella	0	0	1	0	0	0	0
Salmonellosis	84	62	1,077	1,185	995	956	1,006
Shigellosis	37	71	732	550	669	974	684
Syphilis, primary & secondary	53	33	539	459	460	364	188
Syphilis, early latent (<1 yr.)	44	37	484	381	373	353	209
Tuberculosis	0	0	906	930	949	1,025	1,046
Typhoid fever, Acute	2	0	12	13	16	33	17

¹ Case totals are provisional and may vary following periodic updates of the database.